

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

Project

Date

Author

TITLE

MOUNTAIN PINE BEETLE CONDITIONS IN LODGEPOLE PINE TYPE
STATE LINE UNIT
ST. JOE NATIONAL FOREST, IDAHO
1951

Appraisal Survey

Forest Insect Laboratory
Coeur d'Alene, Idaho
January 23, 1952

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ABC 1-30

RED 1/30

TT 2/8

BT 2-4

Mountain Pine Beetle Conditions in Lodgepole Pine Type
State Line Unit
St. Joe National Forest, Idaho
1951 ^{1/}

Appraisal Survey

An outbreak of the mountain pine beetle (Dendroctonus monticolae Hopk.) was discovered in lodgepole stands in the headwaters of the St. Joe River on the St. Joe Forest in 1948. The infestation was confined to an area lying between the Idaho-Montana state line, and the St. Joe River in T. 45 N., R. 7, 8, 9 E.

The initial examination made in 1948 on a limited area showed that parts, at least, of the area was infested to the extent of a tree per acre. A subsequent survey made in 1949 of 2,700 acres indicated an infestation of from 0.16 to 1.2 infested trees per acre. At that time it was evident that the infestation covered a greater acreage than had been anticipated. Such losses in the heavily stocked stands of lodgepole pine were not considered a very serious situation providing it did not continue too long or build to greater proportions. There was, however, an indication of an incipient infestation in white pine where white pine occurs as a part of the type.

A thorough survey was made in 1950. The area of infestation was determined to be 10,900 acres. Data obtained showed a reliable estimate of 0.41 infested lodgepole pine and 0.03 infested white pine per acre. The small degree of infestation in the white pine indicated that the type was not in immediate danger. No control was recommended.

The unit was resurveyed during the fall of 1951. A 4 percent coverage of the area gave the following data:

Acres	10,900
Infested trees per acre (LPP)	0.144 ± 0.034
Total estimated infested trees	$1,570 \pm 370$

No infested white pine were recorded on the survey. Several attacked white bark pine were found and were counted with the lodgepole pines. The attacked white bark pine were slightly over 1 percent of the attacked trees recorded.

^{1/} Prepared by T. T. Terrell.

The above data indicates a marked drop in the infestation from the previous year. From the abundance of dead snags insect activity seems to have been moderately heavy for a long period. Apparently a change in type is occurring in which the mountain pine beetle may be a secondary factor.

It is believed that this infestation may continue for several years, fluctuating to some extent from year to year. A policy of watchfulness is recommended.

ABSTRACT OF FOREST INSECT SURVEY

Type of survey: Appraisal Field Station Reporting: Coeurd'Alene

Survey area: State Line Unit of the St. Joe Nat. For. Date: Jan. 23, 1952

Project area: State: Idaho Co.: Shoshone

Insect spp.: Dendroctonus monticolae, mountain pine beetle

Host spp.: Lodgepole pine

Status of infestation: Epidemic of several years standing. Decreasing

Scope of infestation: 10,900 ; 1,570 ; 0.144 ;
(Total Ac.) (Total Tr.) (Total b.m.) (Trees/Ac.) (b.m./Ac.)

Acreage of defoliation: (Heavy) ; (Medium) ; (Light) ; (Total)

Ownership (Acres): 100% ; ; ;
(Federal) (Private) (State) (Other)

Land status: Virgin

Timber resource value: (Current killing) Light value unless other timber adjacent
in Montana is sold and roads are developed into the area
Past ___ yr cumulative: _____

Ultimate loss, if no control: Probably no more than
annual growth.

Industry dependence: None

Control method recommended: None

Estimated control costs: (Total) ; (Per Tr.) ; (Per Ac.) ; (Per b.m.) ;

Duration and time of control operation: _____

Reduction of infestation expected by control: _____

Period of control benefits expected without additional control action: _____

Agency expected to perform control operation: _____

Remarks: This area would be valuable for telephone poles providing a similar
area in Montana were developed. In the meantime the infestation seems to be
dying down.